ABSTRACT

Cyclic verification of code integrity is applied to an object by identifying multiple segments of the object. Each segment is separated into multiple blocks, and a message authentication code (MAC) value of each of these segments is computed. The computed module MAC values are then incorporated into selected ones of the multiple segments (referred to here as "checker segments"), which may also have their MAC values incorporated into other checker segments. A new MAC value for each of the checker segments is then calculated. A new block is added to each of the checker segments that results in restoring the MAC value of the checker segment back to its original value. Thus, the checker segments can be subsequently verified based on the MAC values stored in other segments.